REMARKS

The present application was filed on August 18, 2003 with claims 1 through 20. Claims 1 through 20 are presently pending in the above-identified patent application. Claims 1, 3, 8, 10, 12, 13 and 15 are proposed to be amended.

In the Office Action, the Examiner objected to claims 3 and 15. In addition, the Examiner rejected claims 1, 4-6, 10-11, 13, and 16-19 under 35 U.S.C. §102(e) as being anticipated by Treadaway et al. (United States Number 7,002,941). In addition, claims 2-3, 7-9, 12, 14-15 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Treadaway et al. in view of Gavin (United States Number 6,937,624).

Independent claims 1, 10 and 13 were rejected under 35 U.S.C. §102(e) as being anticipated by Treadaway et al. With regard to claim 1, for example, the Examiner asserts that Treadaway discloses a method for compensating for a frequency offset (between first and second clock signals, citing col. 4, lines 30-53) between an ingress local area network (Fast Ethernet, Id. and Abstract) and an egress local area network (wireless metropolitan area network, col. 4, lines 30-53 and abstract) communicating over a transport network (router/switch, Fig. 1), said ingress local area network employing an ingress inter-packet gap between each packet in a packet flow (inter-packet gap for Fast Ethernet overhead, col. 12, lines 1-67, col., 13, lines 1-4), said method comprising the steps of: receiving a plurality of packets over said transport network originating from said ingress local area network (col. 4, lines 30-37); and providing said plurality of received packets to said egress local area network with an egress inter-packet gap between each of said received packets, wherein a size of said egress inter-packet gap is adjusted to compensate for said frequency offset (adjusting inter-packet gap for Fast Ethernet data packets to compensate for frequency difference between first clock signal and second clock signal, col. 4, lines 30-53).

Each of the independent claims have been amended to emphasize that the size of the egress inter-packet gap is increased or decreased to compensate for a frequency offset. For example, in claim 1, the size of the egress inter-packet gap is decreased when the ingress local area network is faster than the egress local area network and is increased to compensate for the frequency offset when the egress local area

network is faster than the ingress local area network. In claim 8, the size of the egress inter-packet gap is less than a size of the ingress inter-packet gap when the ingress local area network is faster than the egress local area network and is greater than a size of the inter-packet gap when the egress local area network is faster than the ingress local area network.

Likewise, in claim 10, the size of the egress inter-packet gap is ~~adjusted~~ decreased based on the fill level when the ingress local area network is faster than the egress local area network and is increased based on the fill level when the egress local area network is faster than the ingress local area network.

In claim 12, the size of the egress inter-packet gap is reduced by deleting one or more idle symbols from the inter-packet gap when the ingress local area network is faster than the egress local area network and is increased by inserting one or more idle symbols in the inter-packet gap when the egress local area network is faster than the ingress local area network. Claim 12 has also been amended to correct a typographical error.

Finally, claim 13 has been amended to emphasize that the size of the egress inter-packet gap is decreased to compensate for the frequency offset when the ingress local area network is faster than the egress local area network and is increased to compensate for the frequency offset when the egress local area network is faster than the ingress local area network.

These amendments are all supported, for example, at page 5, lines 5-13.

In Treadaway, however, a packet retriever adjusts an inter-packet gap for the Fast Ethernet data packets according to an amount of space available in the packet buffer. The size of the inter-packet gap, however is always decreased, because by design, the frequency of the second clock signal is lower than the frequency of the first clock signal. See, Col. 4, lines 40-42. Treadaway is adjusting the frequency on the local area network (Fast Ethernet) to match the frequency of the metropolitan radio network. Treadaway assumes that the metropolitan network is always faster than the Fast Ethernet.

The ingress and egress local area networks of the present invention, on the other hand, are operating at similar nominal frequencies subject to a frequency offset within tolerances (see, page 6, lines 8-10, and page 7, line 30, to page 8, line 2). For

example, the frequency of the egress local area network 160 may each be, for example, 10 Mbps, 100 Mbps or 1 Gbps (+/- 100 ppm). Thus, the expected worst-case frequency offset in the exemplary embodiment will be 200 ppm. The frequency offset can be in either direction, and the inter-packet gap is adjusted appropriately. This ability to accommodate positive or negative frequency offsets is not disclosed or suggested by Treadaway.

The Examiner has cited Gavin for its disclosure of a receiver discarding more bytes from the transmitter when the system clock frequencies on both sides are the same. The Examiner suggests that the size of the inter-packet gap will decrease because the receiver will discard the idle bytes of inter-packet gaps without using real or active data. Citing Col. 1, lines 45-67, and col. 2, lines 1-7. Like Treadaway, Gavin is limited to frequency offset correction in only one direction. As discussed hereinafter, the background discussion in Gavin is limited to *increasing* the inter-packet gap.

Gavin notes that "if the system clock and the recovered clock were exactly the same, the data would be read from the FIFO and the same inter-packet gap would be applied. If the clocks are different then the inter-packet gap will be lost or gained. *The gain of inter-packet gap is not important*, because the gain will disappear at the next unit when the IPG is not written. However, *the loss of inter-packet gap is more problematic, particularly in a cascade*. In such a case, bytes of inter-packet gap may be lost at several nodes. In a worst case, for a particular packet a byte of inter-packet gap may be lost at each node on a ring or in a cascade and when the packets arrive at the last node on the ring the inter-packet gap has shrunk so much that the node cannot correctly receive the packet. Col. 1, lines 4-17. Gavin further notes that "a current solution is to compensate for the worst case by arbitrarily increasing the number of idle bytes in an inter-packet gap such that in the worst case where a byte is lost at each interface the number of bytes of inter-packet gap received at the end of the ring is sufficient for the packet to be recovered correctly." *Id.* at lines 18-23. On the whole, however, Gavin suggests that increasing the size of the inter-packet gap in this manner is inefficient. See, for example, col. 2, lines 28-30.

Since the background discussion in Gavin explicitly teaches against decreasing the inter-packet gap, Gavin is ***teaching away*** from the present invention. In

addition, due to this teaching, a person of ordinary skill in the art would not combine Treadaway and Gavin

Thus, Treadaway and Gavin, alone or in combination, do not disclose or suggest increasing and decreasing the size of the egress inter-packet gap to compensate for a frequency offset, as variously required by each independent claim, as amended (as outlined above).

Applicants respectfully request the withdrawal of the rejections of independent claims 1, 8, 10, 12 and 13.

Dependent Claims

Claims 2-7, 9, 11 and 14-20 are dependent on independent claims 1, 8, 10 and 13, respectively, and are therefore patentably distinguished over Treadaway and Gavin, alone or in combination, because of their dependency from independent claims 1, 8, 10 and 13 for the reasons set forth above, as well as other elements these claims add in combination to their base claim

Conclusion

All of the pending claims following entry of the amendments, i.e., claims 1-20, are in condition for allowance and such favorable action is earnestly solicited

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Examiner is invited to contact the undersigned at the telephone number indicated below.

The Examiner's attention to this matter is appreciated.

Respectfully submitted,

Kevin M. Mason

Date: July 19, 2007

Kevin M. Mason
Attorney for Applicants
Reg. No. 36,597
Ryan, Mason & Lewis, LLP
1300 Post Road, Suite 205
Fairfield, CT 06824
(203) 255-6560